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Has research on the social acceptance of wind energy run out of steam?

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Has research on the social acceptance of wind energy run out of steam?

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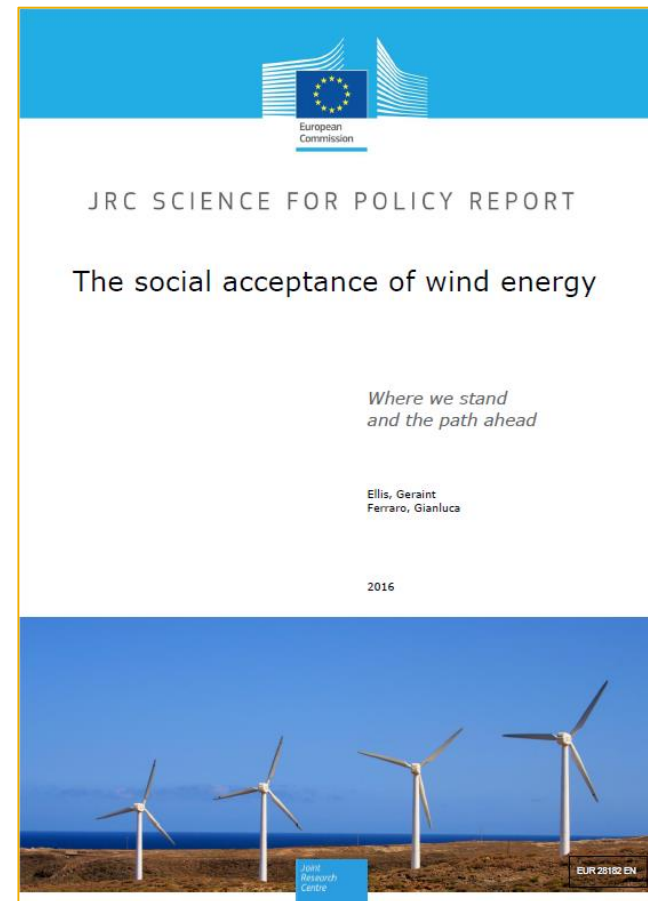
Why is this important?

- 'Social acceptance' captures a key aspect of energy-society relationships;
- It helps define both delivery (RES) and democracy and shaped future energy pathways;
- Some positive regime pressure but acceptance issues appear to becoming *the* key limiting factor in expanding wind in some areas;
- Governments and developers (sometimes) respond based on this research;
- Research on wind energy has set many of the questions and concepts for other technologies;
- A need to reflect on what we are trying to find out, and why.

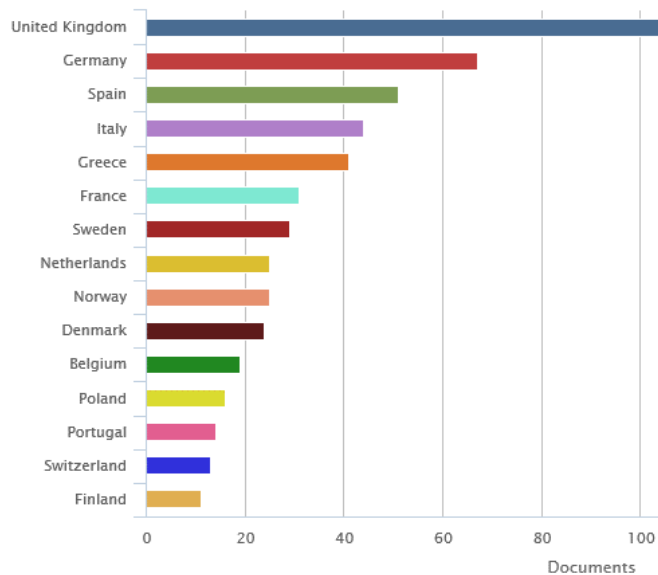


The Social Acceptance of Wind Energy: *Where we stand and the path ahead*

- Review of literature on social acceptance of wind energy undertaken for the European Commission's Joint Research Centre in late 2016.
- Aims to provide evidence support for EU policy.
- Reviews key conceptual issues and main drivers of community concerns including attitudes, impacts and governance of wind energy projects.
- Also focuses on future research and key implications for policy and practice.
- Report is available here:
<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/social-acceptance-wind-energy-where-we-stand-and-path-ahead>



Research into Social Acceptance of Wind Energy

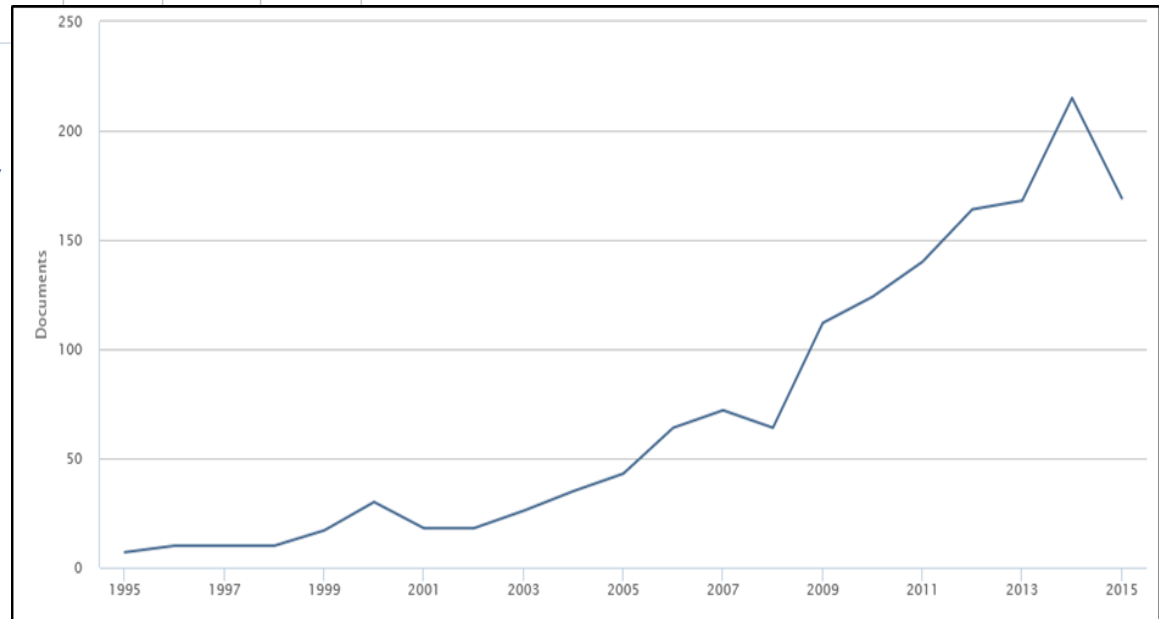


Most common European countries affiliated with 'wind energy' and 'community' research outputs, 1995-2015.

'Wind energy' & 'community' research outputs, 1995-2015

Source: Scopus

- Emphasis on peer-reviewed research, some grey literature
- Key searches + snowballing
- Focus on European context
- C.230 studies

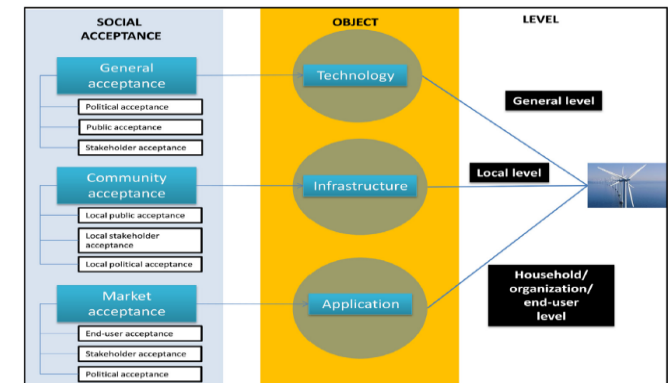


Social Acceptance: Conceptual Issues

- From a bi-lateral society-technology relationship to a more complex social-technical concept.
- Relationships between communities and turbines are dynamic, context specific & complex.
- Tendency to focus on single projects and therefore open to isolated 'fixes'.
- Concept has strong resonance with a many actors and creates an important space for debate and enquiry.
- It must also engage a range of other concepts including: power, justice, place attachment.



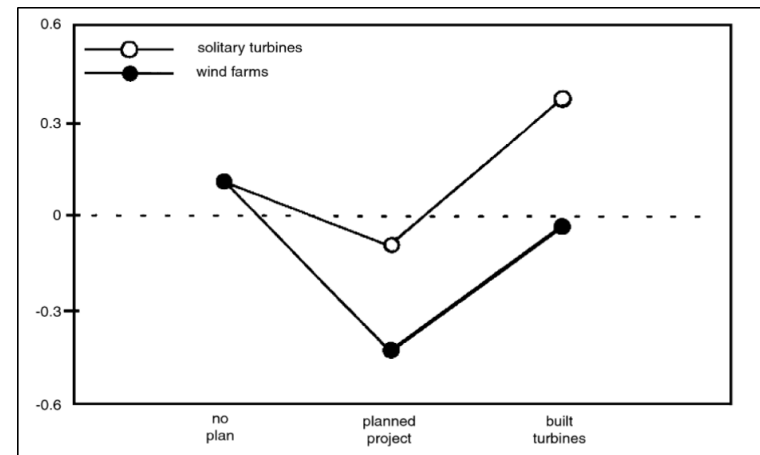
After Wüstenhagen et al 2007)



from Upham et al 2014

Community Attitudes

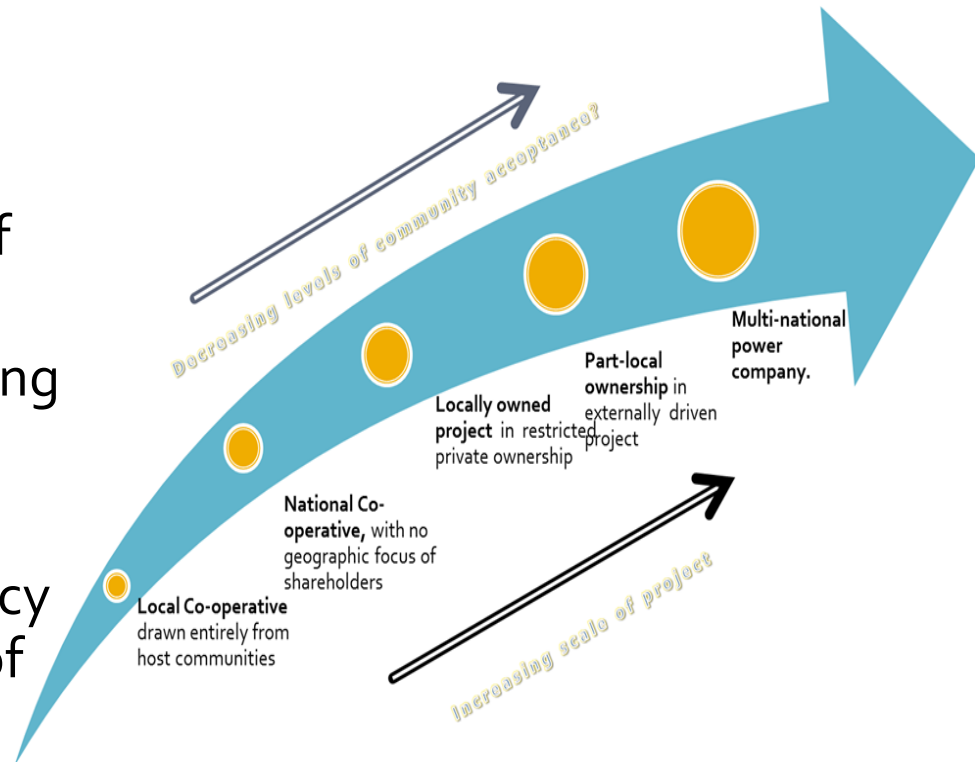
- Large body of research that has examined the attitudes of host communities, mostly based on individual & isolated case studies;
- Perspectives from range of disciplines;
- Body of evidence that indicates the influence of:
 - Individual attributes (demography etc);
 - Relationships (with developers etc);
 - Context (landscape, actors etc);
 - Perceptions of process;
 - Perceived impacts.
- Methods have constrained:
 - Complexity and dynamic nature of individual disputes
 - Link between action, attitudes and wider structural elements of the energy system.



From Wolsink 2007

Governance of wind energy projects

- The way in which projects are regulated shape levels of social acceptance.
- Governance factors also influence:
 - Perceived costs and benefits of projects.
 - Opportunities for benefit sharing
 - Procedural justice and participation
 - Effectiveness of the broad policy environment to take account of community concerns



Summary of influences on social acceptance

<i>Issue</i>	<i>Key influences</i>	
Individual attitudes	<ul style="list-style-type: none"> • Age, gender etc • Strength of place attachment • Political beliefs and voting preferences • Emotional response • Prior experience of wind turbines 	<ul style="list-style-type: none"> • Attitudes to environmental issues • Psychological factors including perception of social norms • Individual roles (consumer, landowner etc) • Familiarity with wind energy
Relationships	<ul style="list-style-type: none"> • Type and level of social capital • Trust in government other public agencies and developers • Proximity to, and visibility of, turbines • Technology-society relationships 	<ul style="list-style-type: none"> • Time, reflecting the dynamic nature of social acceptance • National-local policy • Regulator-Developer links • Discourses within and between communities
Contextual issues	<ul style="list-style-type: none"> • Policy regimes • Project design – turbine height, colour number and massing • Place attachment 	<ul style="list-style-type: none"> • Range and mix of actors • Ownership of proposed project • Specific siting issues • Cumulative impacts
Perceived impacts	<ul style="list-style-type: none"> • Noise • Landscape • Shadow flicker • Property values • Level of economic benefit • Bio-diversity: bats, birds • Infrasound 	<ul style="list-style-type: none"> • Navigation lights • Health concerns • Levels of economic benefits • Disruption of 'place' • Efficiency of turbines and wind energy • Distributive justice
Process-related issues	<ul style="list-style-type: none"> • Trust in institutions involved • Transparency and openness • Procedural justice • Expectations and aspirations of public participation • Availability and quality of information 	<ul style="list-style-type: none"> • Power in the participation process • Value places on lay and expert knowledge • Timing • Discourses of community, developer, regulatory bodies • Fait accompli

Wider reflections

Effective insights on why but how remains a major challenge;

Concepts

- Is social acceptance the best conceptual frame?
- Alternative concepts are there?
- A better understanding of context, not just objectors;
- The potential of more complex socio-ecological models;
- Must better link to system characteristics and the process of transition.

Research direction and coherence

- Developing a more coherent and diverse community of researchers;
- New research questions: e.g.
 - ownership of wind as an asset;
 - dynamics of acceptance;
 - research of effect of developer and regulator activity;
 - Role of the State.

Wider reflections

Methods

- The dominance of discrete case studies and poor comparability;
- Development of common research protocols;
- More methodological innovation and ambition for system learning.

Knowledge exchange

- New ways of promoting a reflexive relationships between researchers, regulators and developers;
- Evidence-based innovative practice;
- Emphasis on portraying complexity and needs for system transformation ... no quick fixes.

Thank you

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